

NICKEL-BASED BRAZE ALLOY COMPOSITIONS,  
AND RELATED PROCESSES AND ARTICLES

ABSTRACT OF THE DISCLOSURE

[0061] A nickel-based braze composition is described, containing nickel, palladium, and restricted amounts of boron and silicon. The composition can also contain tantalum, titanium, and zirconium, as well as aluminum, chromium, and cobalt. A method for joining two metal components, using the braze composition, is also described. The braze composition can also be used to fill cracks or other cavities in a component, e.g., a gas turbine part formed from a nickel-based superalloy. Articles of manufacture which contain the braze composition are also described.